P504S (AMACR) (RM) [13H4]

Prediluted Rabbit Monoclonal Antibody
903-3207-100517

BIOCARE MEDICAL

VP Echelon™ Series

Catalog Number: **AVA 3207 G**

Description: 6.0 ml, prediluted

Intended Use:
Analyte Specific Reagent. Analytical and performance characteristics are not established.

Summary and Explanation:
P504S, also known as α-Methylacyl coenzyme A racemase (AMACR), is a peroxisomal and mitochondrial enzyme that plays a role in bile acid synthesis and β-oxidation of branched chain fatty acids (1). *AMACR* was initially identified from a cDNA library as a gene that is over-expressed in human prostate cancer; with little or no expression in normal or benign prostate glands (2-3). In immunohistochemistry, P504S has been shown to be a marker of prostatic adenocarcinoma (2-5). Additionally, prostate glands involved in prostatic intraepithelial neoplasia (PIN), have been found to express P504S; whereas P504S was nearly undetectable in benign glands. (5-6).

Source: Rabbit monoclonal

Clone: 13H4

Isotype: IgG

Known Applications:
Immunohistochemistry (formalin-fixed paraffin-embedded tissues)

Supplied As:
Buffer with protein carrier and preservative

Storage and Stability:
Store at 2ºC to 8ºC. Do not use after expiration date printed on vial. If reagents are stored under conditions other than those specified in the package insert, they must be verified by the user. Diluted reagents should be used promptly; any remaining reagent should be stored at 2ºC to 8ºC.

Analyte Specific Reagent Note:
The P504S antibody has been quality controlled by IHC using Ventana's U IHC DS uDAB-uRed Template with *ultra*View AP Detection Kit and ULTRA CC1 Standard. However, it is the responsibility of the laboratory or end-user to develop their own protocol and label appropriate disclaimer.

References:

1. Ferdinandusse S, *et al.* Subcellular localization and physiological role of alpha-methylacyl-CoA racemase. J Lipid Res. 2000 Nov; 41(11):1890-6.
2. Xu J, *et al.* Identification of differentially expressed genes in human prostate cancer using subtraction and microarray. Cancer Res. 2000 Mar 15; 60(6):1677-82.
3. Rubin MA, *et al.* alpha-Methylacyl coenzyme A racemase as a tissue biomarker for prostate cancer. JAMA. 2002 Apr 3; 287(13):1662-70.
4. Luo J, *et al.* Alpha-methylacyl-CoA racemase: a new molecular marker for prostate cancer. Cancer Res. 2002 Apr 15; 62(8):2220-6.
5. Zhou M, *et al.* Alpha-Methylacyl-CoA racemase: a novel tumor marker over-expressed in several human cancers and their precursor lesions. Am J Surg Pathol. 2002 Jul; 26(7):926-31.
6. Wu CL, *et al.* Analysis of alpha-methylacyl-CoA racemase (P504S) expression in high-grade prostatic intraepithelial neoplasia. Hum Pathol. 2004 Aug; 35(8):1008-13.
7. Center for Disease Control Manual. Guide: Safety Management, NO. CDC-22, Atlanta, GA. April 30, 1976 "Decontamination of Laboratory Sink Drains to Remove Azide Salts."
8. Clinical and Laboratory Standards Institute (CLSI). Protection of Laboratory Workers from Occupationally Acquired Infections; Approved Guideline-Fourth Edition CLSI document M29-A4 Wayne, PA 2014.

Biocare Medical
60 Berry Drive
Pacheco, CA 94553
USA

Rev: 062117

Tel: 800-799-9499 | www.biocare.net | Fax: 925-603-8080